



Active Bacterial Core Surveillance (ABCs) Report

Emerging Infections Program Network

group A streptococcus, 2004 - *Provisional*



ABCs Areas

California (3 county San Francisco Bay area); Colorado (5 county Denver area); Connecticut; Georgia (20 county Atlanta area); Maryland (6 county Baltimore area); Minnesota; New York (15 county Rochester and Albany areas); Oregon (3 county Portland area); Tennessee (11 urban counties)

ABCs Population

The surveillance areas represent 27,557,399 persons.

Source: National Center for Health Statistics bridged-race vintage 2003 postcensal file

ABCs Case Definition

Invasive group A streptococcal disease: isolation of group A streptococcus (*S. pyogenes*) from a normally sterile site or from a wound culture accompanied by necrotizing fasciitis or streptococcal toxic shock syndrome in a resident of a surveillance area in 2004.

ABCs Methodology

ABCs personnel routinely contacted all microbiology laboratories serving acute care hospitals in their area to identify cases. Standardized case report forms that include information on demographic characteristics, clinical syndrome, and outcome of illness were completed for each identified case. Strains were *emm*-typed at CDC. Regular laboratory audits assessed completeness of active surveillance and detected additional cases.

All rates of invasive group A streptococcal disease were calculated using population estimates for 2003. For national projections of cases, race- and age-specific rates of disease were applied from the aggregate surveillance area to the age and racial distribution of the 2003 U.S. population. Cases with unknown race were distributed by site based on reported race distribution for known cases within the eight age categories.

Reported ABCs Profiles

Race	No. (Rate [*])
White	659 (3.1)
Black	190 (4.5)
Other	44 (2.5)

Unknown race (n=147) distributed among knowns

* Cases per 100,000 population for ABCs areas

Ethnicity	No. (Rate [*])
Hispanic	75 (3.2)
Non-Hispanic	367 -----
Unknown	452 -----

* Cases per 100,000 population for ABCs areas

Citation

Centers for Disease Control and Prevention. 2005. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Group A Streptococcus, 2004 - *Provisional*. Available via the Internet: <http://www.cdc.gov/ncidod/dbmd/abcs/survreports/gas04.pdf>

Age (years)	Cases	Deaths
	No. (Rate [*])	No. (Rate [*])
< 1	16 (4.3)	0 (0.0)
1	13 (3.5)	0 (0.0)
2-4	27 (2.4)	2 (0.18)
5-17	49 (0.99)	1 (0.02)
18-34	134 (2.0)	6 (0.09)
35-49	189 (2.8)	19 (0.29)
50-64	191 (4.3)	24 (0.53)
≥ 65	274 (9.0)	53 (1.7)
Total	893 (3.2)	105 (0.38)

* Cases or deaths per 100,000 population for ABCs areas

ABCs Area	Most common emm types [*]	% of area isolates
California	49, 1, 12, 28, 3, 11, 87	67.0
Colorado	1, 3, 28, 89, 114, 12, 101	59.6
Connecticut	5, 12, 89	52.4
Georgia	1, 12, 6, 83	61.3
Maryland	1, 27G, 3, 87, 4, 102, 11	54.7
Minnesota	1, 3, 28, 12, 89	72.1
New York	1, 28, 5, 12, 2	64.0
Oregon	1, 92, 12, 2	54.4
Tennessee	1, 3, 12, 44/61, 28	64.6
Total	1, 3, 12, 28	47.3

* Requires a minimum of 3 or more isolates and ≥ 5% of isolates typed

Syndrome	No. (%)
Cellulitis	289 (32.3)
Necrotizing fasciitis	66 (7.4)
Pneumonia	123 (13.8)
Primary bacteremia	255 (28.5)
Streptococcal toxic shock	51 (5.7)

Note: Some cases had more than one syndrome.

Potentially preventable invasive group A streptococcal disease

During 2004, 5 cases (ages 9, 17, and 31 months and 66 and 86 years) of invasive GAS disease were detected in patients with varicella.

National Projection of Invasive Disease

Cases: 9,525 (3.3/100,000)

Deaths: 1,150 (0.39/100,000)

For more information, visit our web site:

<http://www.cdc.gov/abcs>